

PRELIMINARY

CameraManSTUDIO™

System II

Broadcast Production Systems

Visibly Better. With Revolutionary Technology.

CSS-2000

CSS-2313

CSS-2017

Introducing CameraManSTUDIO™ from ParkerVision. The first PC-based studio production system to combine Digital Video Effects, Digital Audio Mixing, VCR Control and the latest in 1-CCD, and 3-CCD CameraMan robotic camera control systems into one interface. This revolutionary technology is a must-have system for studio applications.

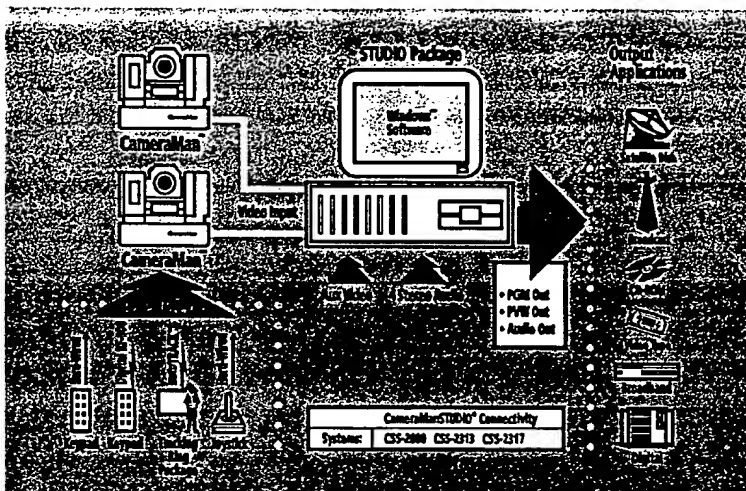
The CameraManSTUDIO™ allows the director to manage and control a multi-camera studio environment with limited resources. By bringing a low-cost camera and studio automation control solution to the industry, CameraManSTUDIO™ directors with limited resources can focus more of their talents on overall production. The CameraManSTUDIO™ is the "value-conscious" solution with professional-quality performance for:

- Independent Studios
- Corporate Production Studios
- Health Care Production Studios
- Government Production Studios
- Education Production Studios
- Religious Broadcast and Studio Productions
- Small Cable and Public Broadcast Networks
- Law Enforcement Production Studios

The integrated CameraMan camera systems also incorporate all of ParkerVision's exclusive camera-control technology with features such as autoTRACK™, WhisperDRIVE Plus™, Digital RF-900™ keypad control, and exceptional location preset accuracy.

System Features

- Common PC interface for video production, including camera control, video switching and special effects, audio mixing, titling, and VCR control.
- User-friendly Windows™ interface.
- Complete plug-and-play system package NTSC or PAL.



Camera Control Features

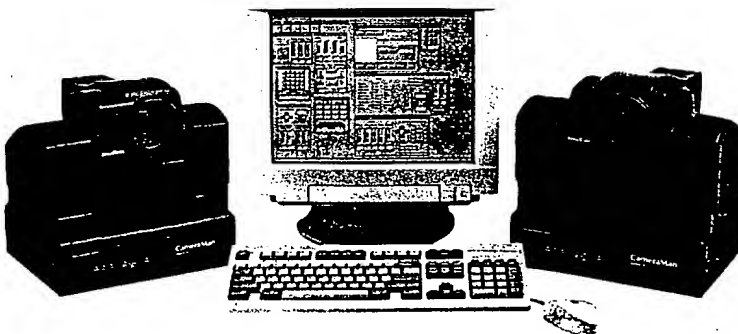
- Control of up to 6 cameras.
- Store and recall unlimited number of location presets.
- Location presets can store a pan/tilt position, zoom perspective, focus, and IMAGE™ setting.
- Adjust all camera parameters including gain, paint, master pedestal, etc.
- Virtual joystick control.
- Variable speed control.

Options

- Separate hard-wired joystick.
- Camera shot-profiler software.

Studio System Features

- Digital video effects unit with over 2,500 different effects.
- Dissolve, fade, zoom, slide, shrink, tumble, strobe, posterizing, curtain effects, etc.
- Luminance and chroma keyers
- 6 separate composite, 4 component, and 4 y/c video inputs.
- 8 channel audio mixer.
- Tape machines are controlled via RS-422.
- Preview Output.
- Program Output.



Why CameraManSTUDIO™?

For these features available only from ParkerVision:

- Communication and studio directors can maximize their talents through the use of CameraMan's proprietary autoTRACK™ technology. With automated presenter "tracking", the director can focus efforts on other camera views and shot selections.
- All studio functions are centralized and controlled from the CameraManSTUDIO™ control center.
- CameraManSTUDIO™ can control up to 6 CameraMan camera systems - each with the ability to support unlimited location presets with ±125° of accuracy.
- Powered by a Pentium processor.
- 17" Color Monitor, PC mouse and joystick provide maximum control flexibility and ease-of-operation.
- Quality audio and video output for satellite, cable, public-switched networks, microwave transmission, or for CD-ROM, videotape, and digital storage.

For more information or a product demonstration, contact us at:

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904-737-1367, or
1-800-532-8034, or
904-731-0958 fax, or
parker@southeast.net e-mail

PARKERVISION®
Visibly Better.™

visit our website at <http://www.parkervision.com>

Visibly Better. With Revolutionary Technology.

Studio PC Features:

- Intel Pentium @ 133 MHz
- Monitor: 17" SVGA, 1280x1024, .26 Dot Pitch
- 1.2 GB IDE Hard Drive, 6x CD-ROM
- 32 MB RAM, upgradeable to 256 MB
- Windows NT workstation with CameraManSTUDIO™ software

Video Features:

- Blackburst gen-lockout input
- (2) infinite window TBC's with digital proc amp adjustments (gain, set-up, hue, and saturation)
- Digital video comb filter
- Independent preview and program output
- Linear Key output
- Multi-Layer real-time digital video mixer
- (1) alpha channel keyer, (2) luminance keyers and (2) wipe/tile generators—all with anti-aliased edges.
- (2) chroma keyers with advanced chroma suppression and shadow preservation.

- Six background generators for dynamic color ramps, static colors and noise.
- Software selection among (6) composite, (4) Y/C, or (4) analog component input signals
- Supports full and half-blending key modes
- Frequency Response (Input to Output):
 - Y: -0.25 dB Max @ 0-4.5 MHz
 - R-Y/B-Y: -0.5 dB Max @ 0-2.0 MHz
- Amplitude Deviation: +2 IRE Max
- Diff. Phase: <1.5°
- S/N Ratio: > 58 dB
- Chroma-Luma Delay: < 15 nS
- Digital Data: SMPTE 125M
- Analog Y/R-Y/B-Y: Betacam
- Analog Composite and Y/C RS-170A

Audio Features:

- Sampling Rates: 44.1 & 48 KHz
- Resolution: 16 bits
- Analog inputs: 8 balanced, +4dB/-10dB

- Analog outputs: 8 balanced, +4dB/-10dB
- Frequency Response: 20 Hz - 20 KHz, +0.5 dB
- Dynamic Range: 92 dB typical
- THD: 1 KHz: 0.003% typical
- Crosstalk: 1 KHz: -95 dB
- Equalizer: High, Mid, and Low frequency of each input.

VCR Control:

- Remote control of (2) source VCRs and (1) record VCR
- (2) LTC and VITC reader/generators

Transition Macros:

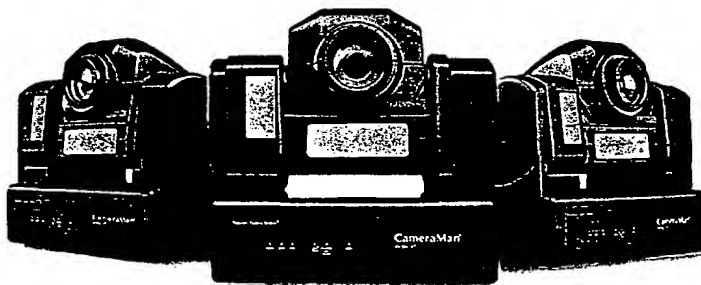
- A sequence of operations, along with the associated delays and operation times, incorporating all controlled devices can be stored and assigned to a recall button.

Special Effects:

- Mosaic, flips, tumbles, Chroma/Luma Keyers
- Luminance Keyers with adjustable Gain & Clip
- Over 100 wipe patterns with 25 different repeat factor variations, with offsets and anti-aliasing edges



With the optional joystick controller, you can control multiple camera parameters (ccu) from a single point.



PARKERVISION®
Visibly Better.™

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ParkerVision offers the following CameraManSTUDIO™ Systems

- NTSC models indicated by G2N, A1N, A3N, and PGN suffixes
- PAL versions indicated by G2P, A1P, A3P, and PGP suffixes

General Pan/Tilt Systems:

- | | |
|-------------------|---|
| CSS-2000-G2N(G2P) | 1-CCD (Single-Chip) Studio System Components: <ul style="list-style-type: none"> • 2 CPT-2000-A1N(A1P) • 1 SPC-2000-N(P) |
| CSS-2313-G2N(G2P) | 3-CCD (Three-Chip, 13x Lens) Studio System Components: <ul style="list-style-type: none"> • 2 CPT-2013-A3N(A3P) • 1 SPC-2000-N(P) |
| CSS-2317-G2N(G2P) | 3-CCD (Three-Chip, 17x Lens) Studio System Components: <ul style="list-style-type: none"> • 2 CPT-2017-A3N(A3P) • 1 SPC-2000-N(P) |

Presenter Systems:

- | | |
|-------------------|--|
| CSS-2000-PGN(PGP) | 1-CCD (Single-Chip) Studio System Components: <ul style="list-style-type: none"> • 1 CPT-2000-A1N(A1P) • 1 CPC-2000-A1N(A1P) • 1 SPC-2000-N(P) |
| CSS-2313-PGN(PGP) | 3-CCD (Three-Chip, 13x Lens) Studio System Components: <ul style="list-style-type: none"> • 1 CPT-2013-A3N(A3P) • 1 CPC-2013-A3N(A3P) • 1 SPC-2000-N(P) |
| CSS-2317-PGN(PGP) | 3-CCD (Three-Chip, 17x Lens) Studio System Components: <ul style="list-style-type: none"> • 1 CPT-2017-A3N(A3P) • 1 CPC-2017-A3N(A3P) • 1 SPC-2000-N(P) |